

FIG. 1

FIG. 2A

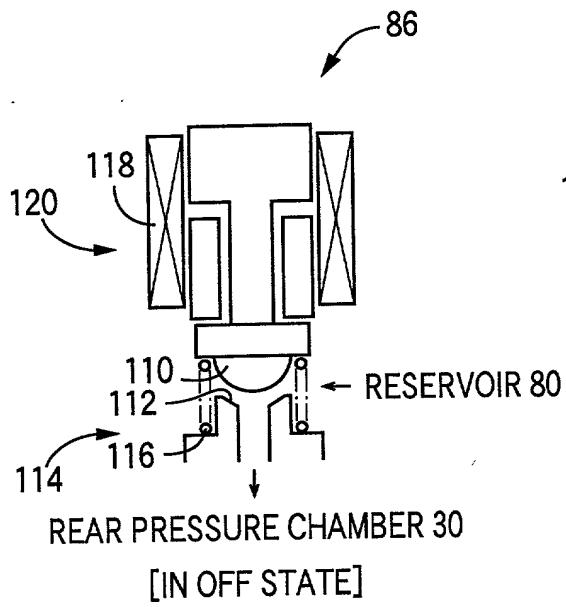
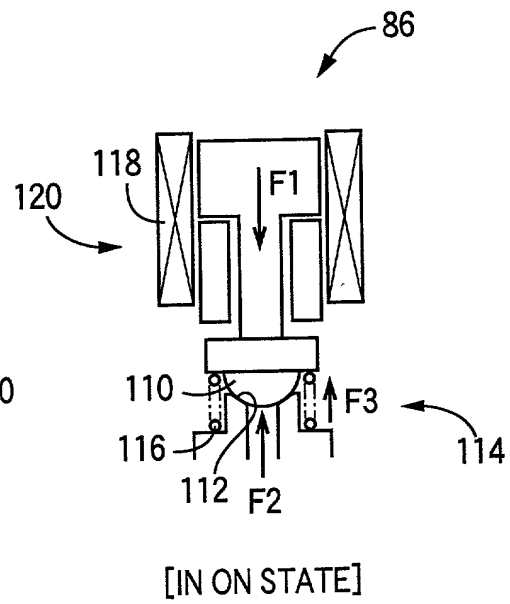


FIG. 2B



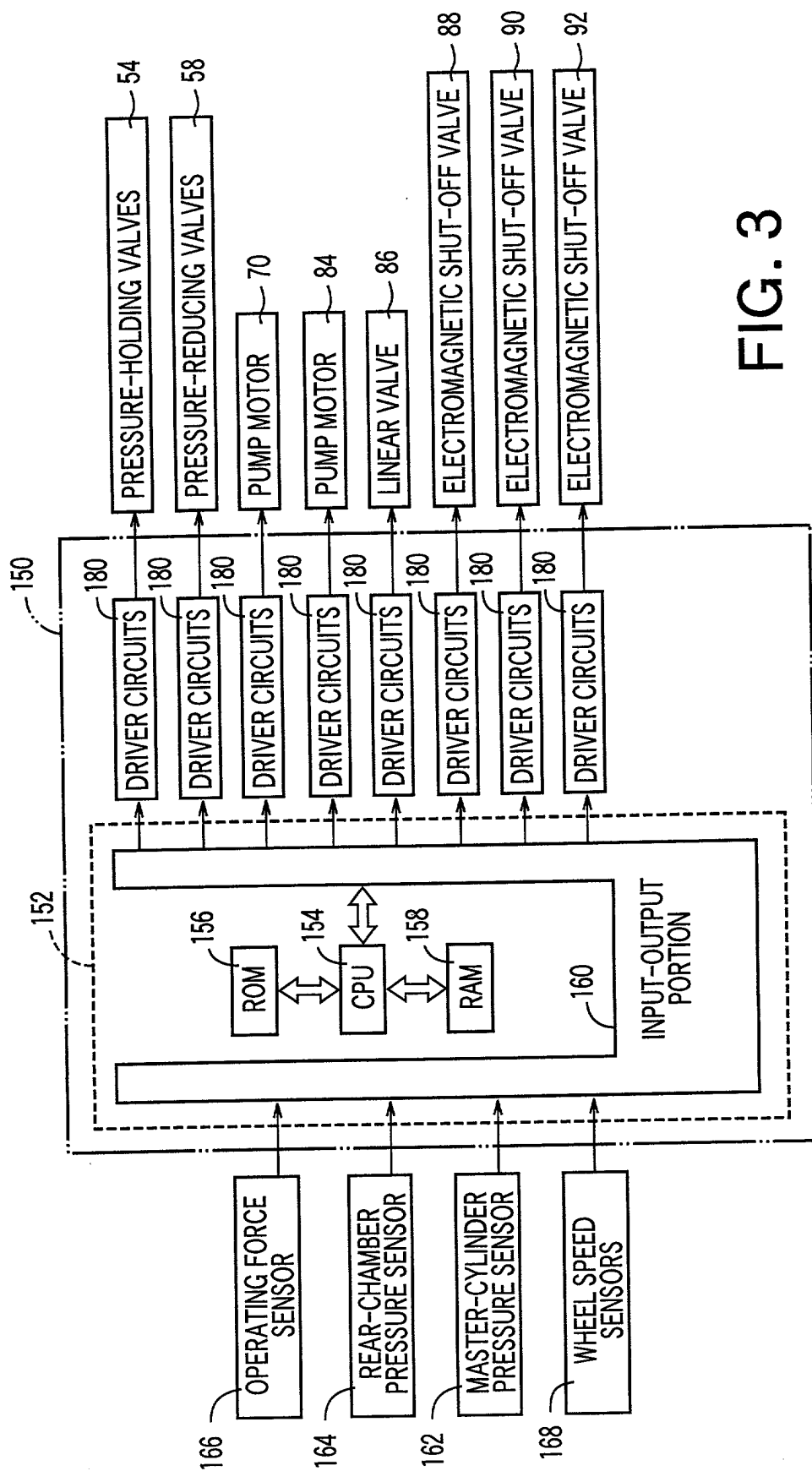


FIG. 3

FIG. 4

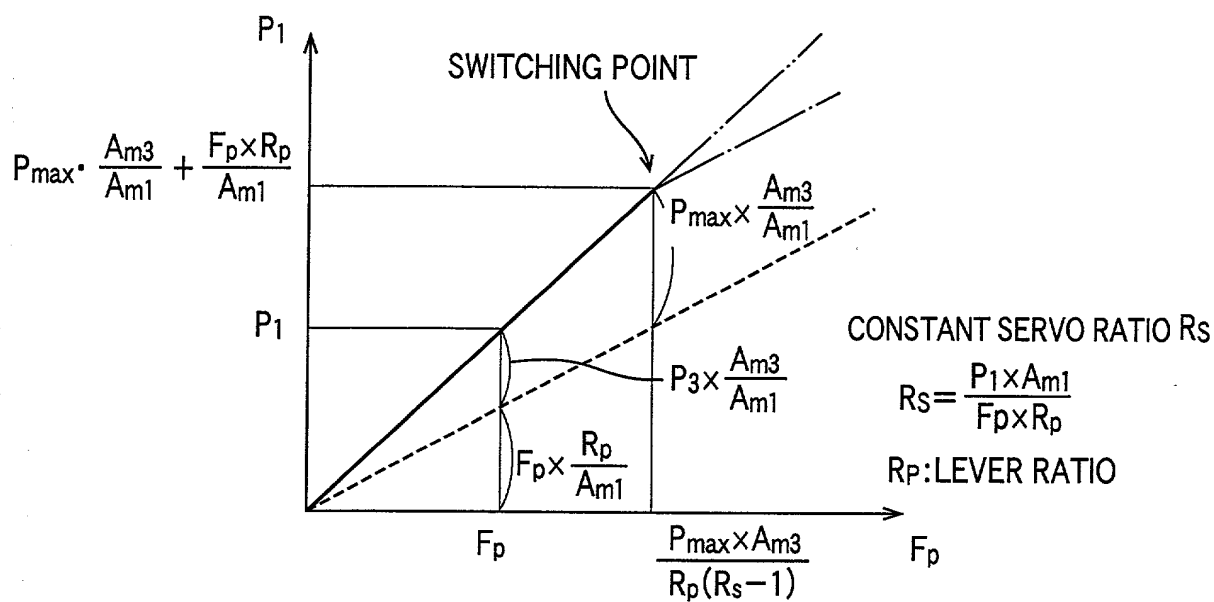


FIG. 5

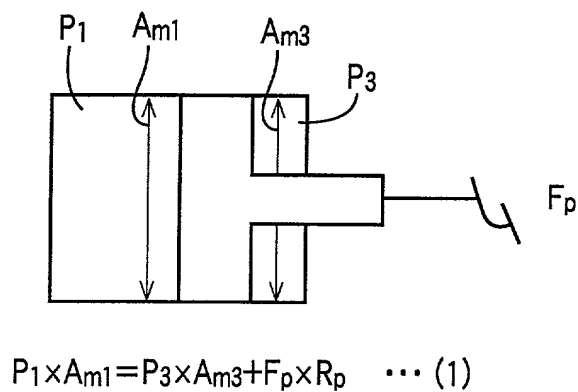


FIG. 6

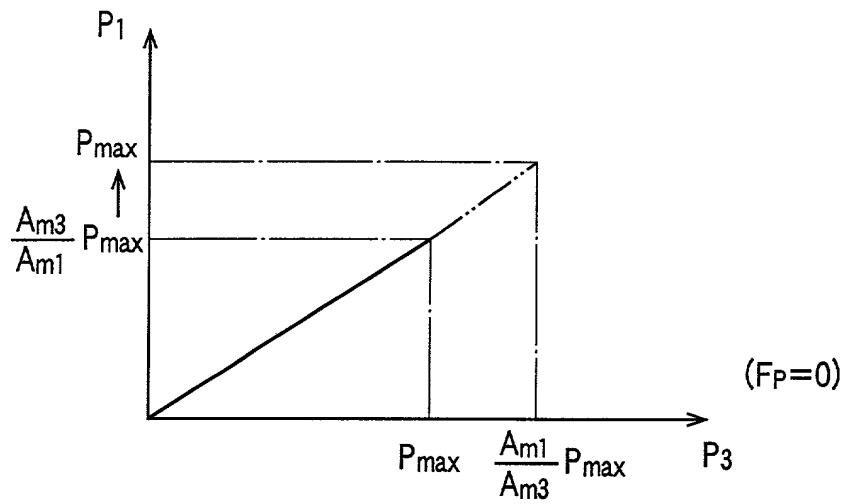


FIG. 7

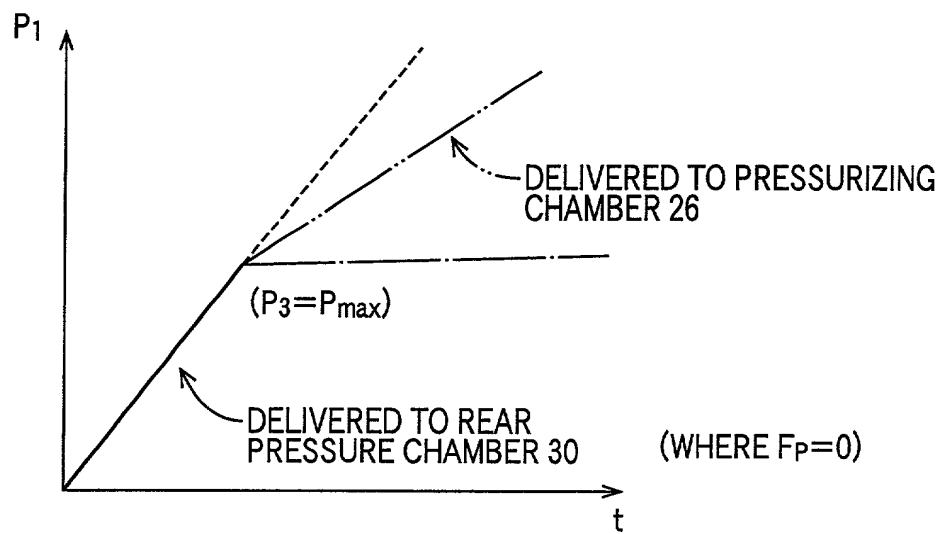


FIG. 8

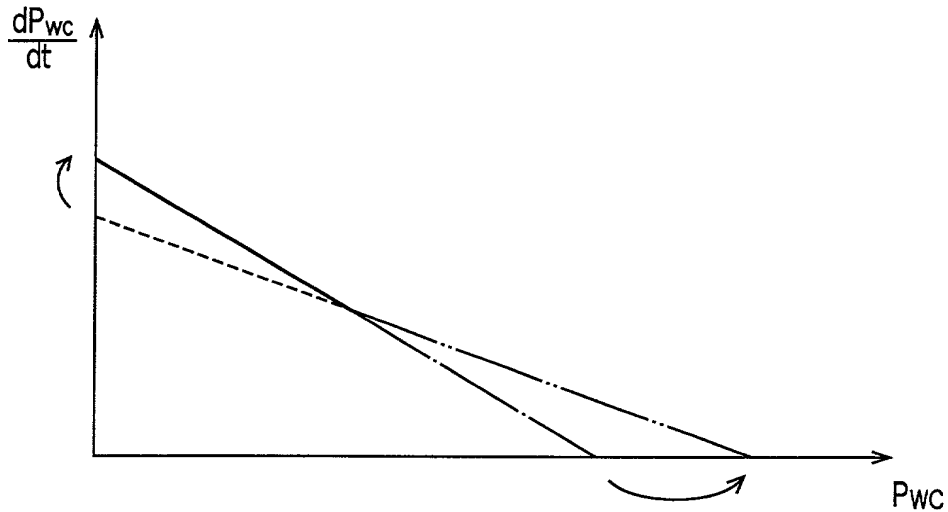


FIG. 9

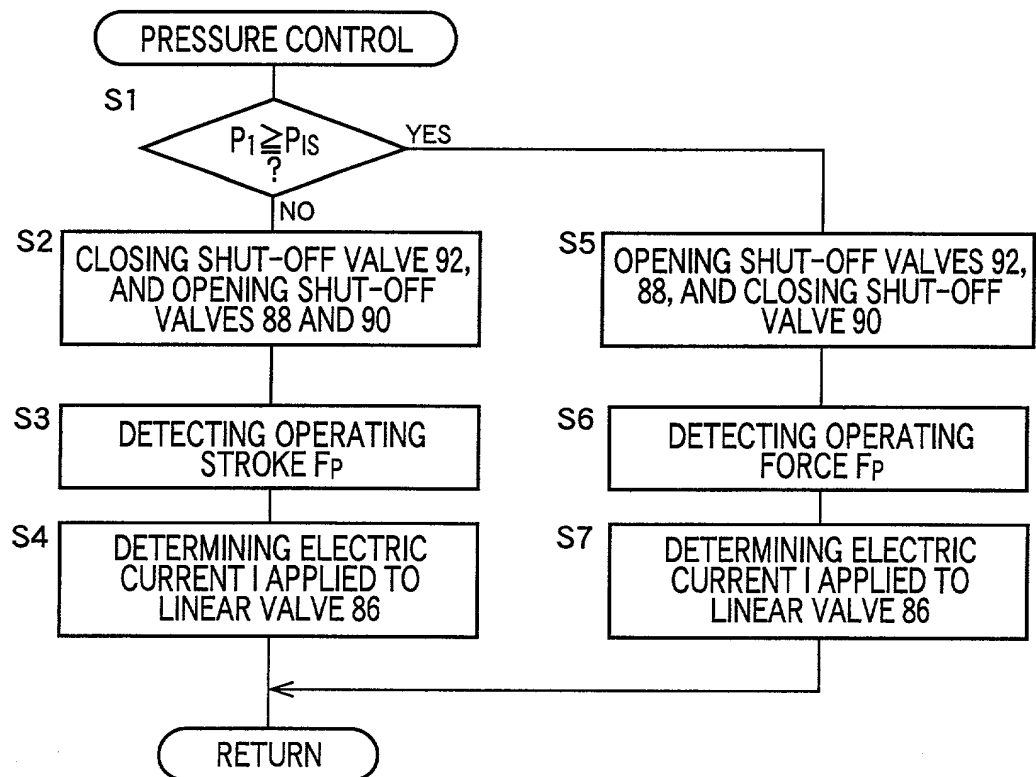
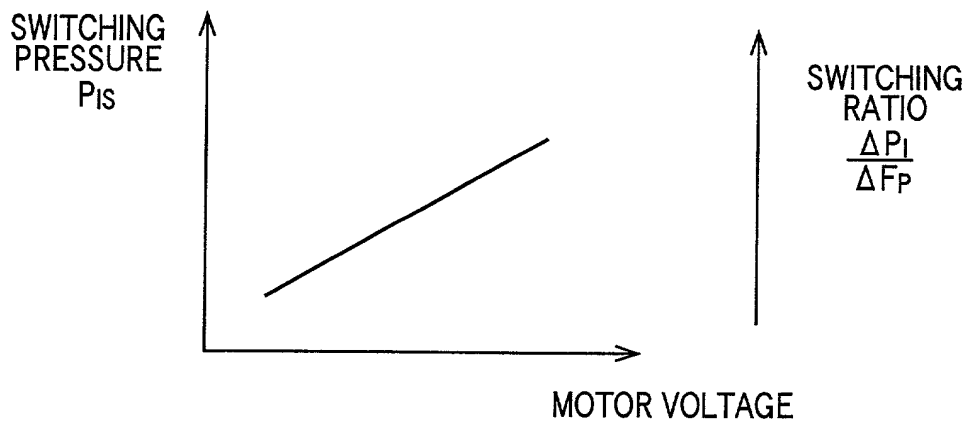


FIG. 10

	FIRST STATE	SECOND STATE
SHUT-OFF VALVE 88	OPEN	OPEN
SHUT-OFF VALVE 90	OPEN	CLOSED
SHUT-OFF VALVE 92	CLOSED	OPEN
RATE OF FLOW q_{wc} INTO BRAKE CYLINDER	$(A_{m1}/A_{m3}) q$	q
BRAKING PRESSURE P_{wc}	$(A_{m3}/A_{m1}) P_{(FP=0)}$	P

0990365 071301
"03ET/20" 25920660

FIG. 11



090355 0430 10E1/0 259E0660

FIG. 12

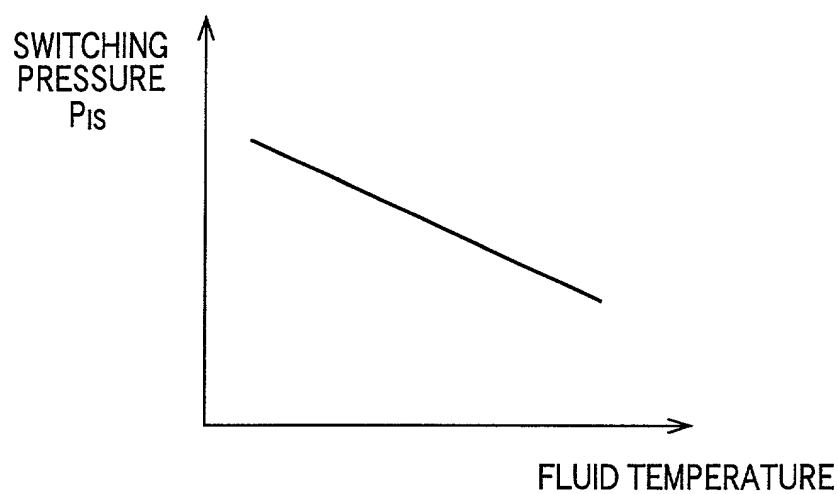
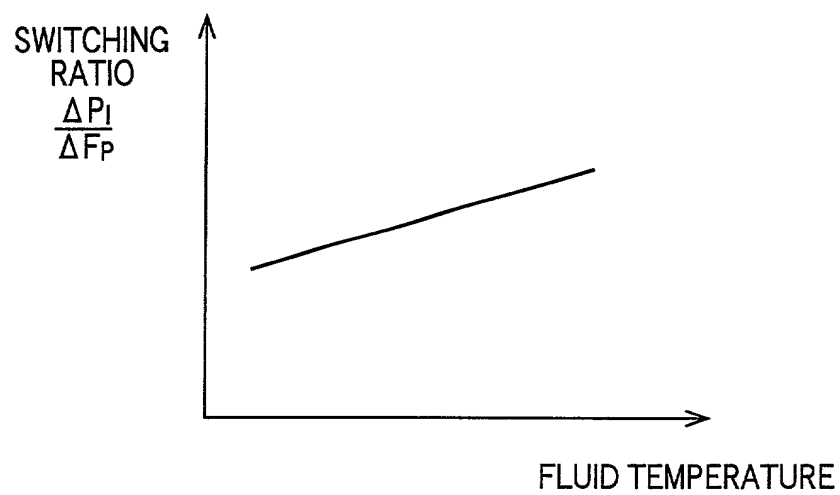


FIG. 13



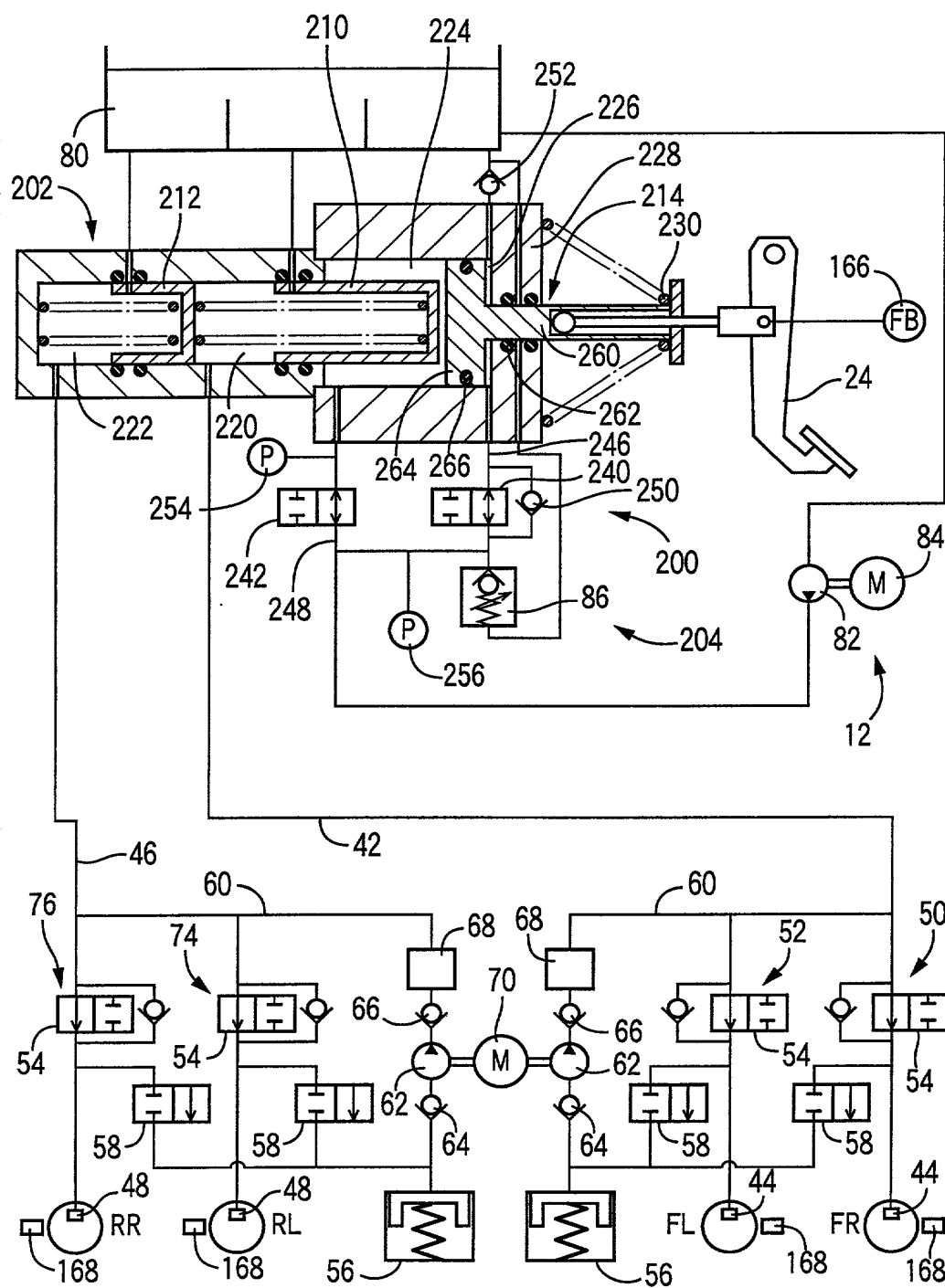
[illegible]

FIG. 16

	FIRST STATE	SECOND STATE
SHUT-OFF VALVE 240	OPEN	CLOSED
SHUT-OFF VALVE 242	CLOSED	OPEN
RATE OF FLOW q_{wc} INTO BRAKE CYLINDER	$(A_2/A_3) \cdot q \cdot (A_2 A_1 / A_3 A_2') \cdot q$	$q \cdot (A_1 / A_2') \cdot q$
BRAKING PRESSURE P_{wc}	$(A_3/A_2) \cdot P \cdot (A_3 A_2' / A_2 A_1) \cdot q$ (FP = 0)	$P \cdot (A_2' / A_1) \cdot P$

FIG. 16

FIG. 17

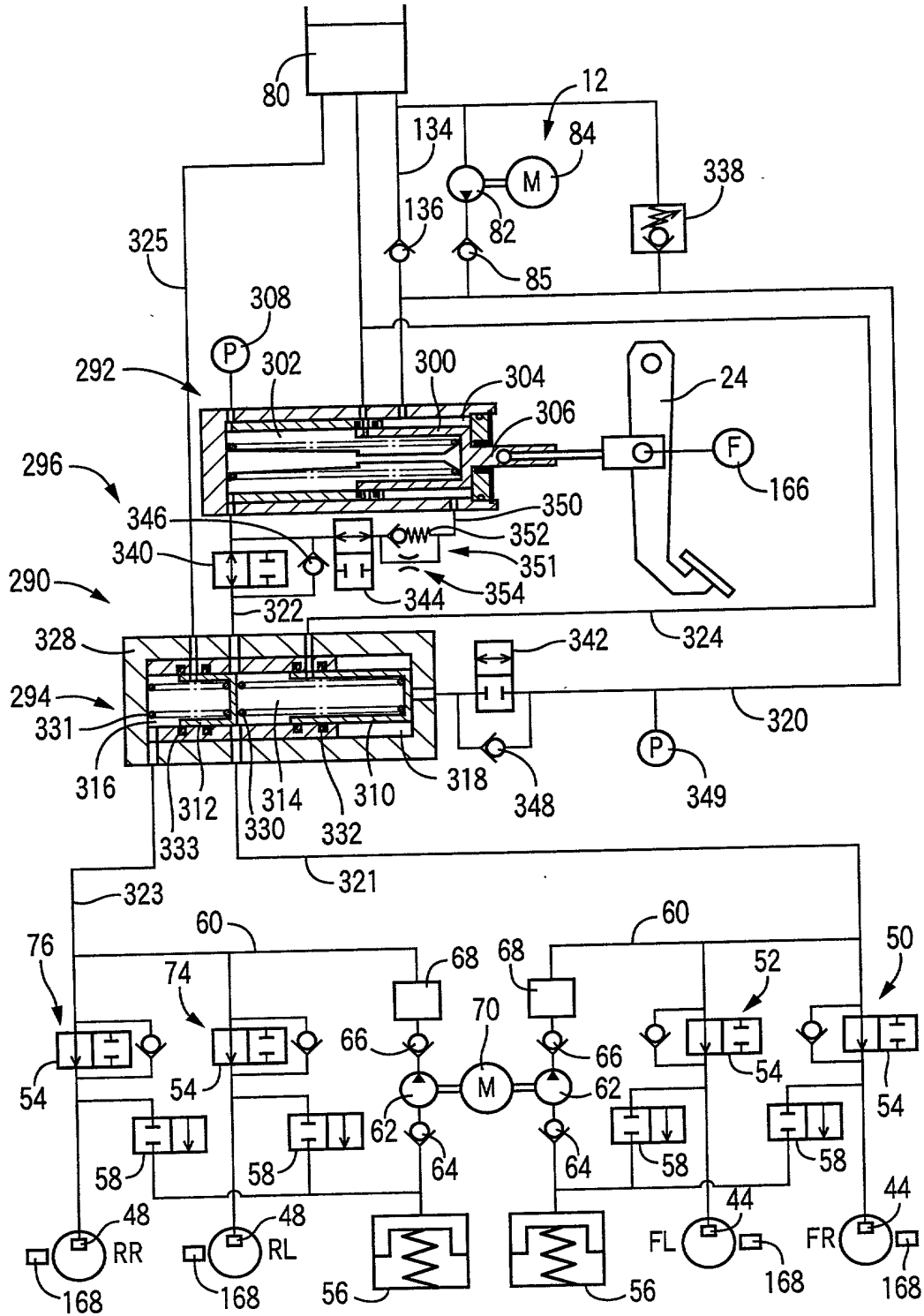


FIG. 18A

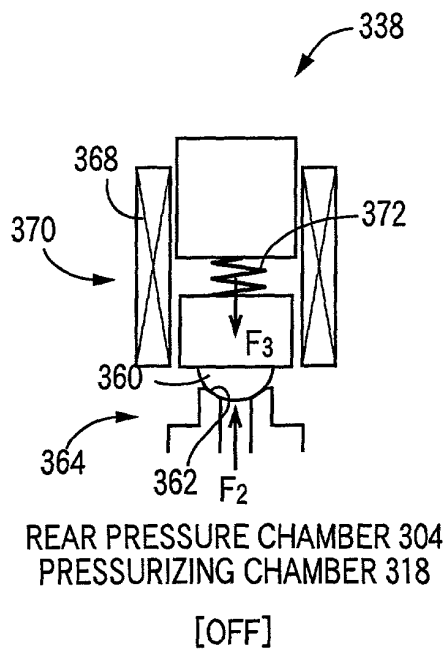


FIG. 18B

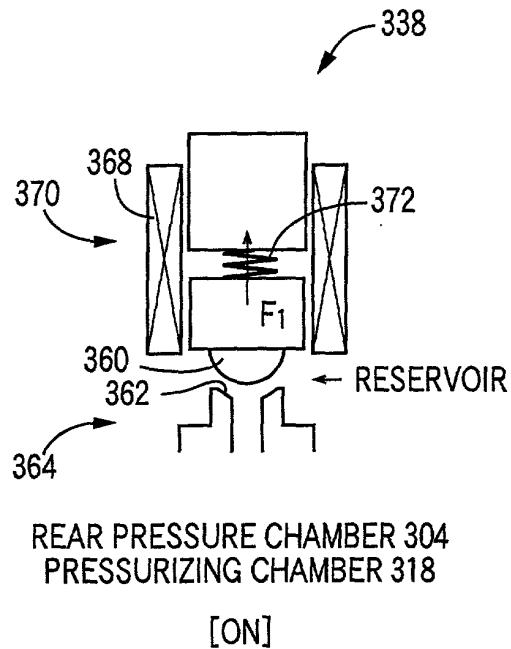


FIG. 19

	FIRST STATE	SECOND STATE
SHUT-OFF VALVE 340	OPEN	CLOSED
SHUT-OFF VALVE 342	CLOSED	OPEN
SHUT-OFF VALVE 344	CLOSED	CLOSED
RATE OF FLOW INTO BRAKE CYLINDER	$(A_{m1}/A_{m3}) \cdot q$	q
BRAKING PRESSURE	$(A_{m3}/A_{m1}) \cdot P$ (FP = 0)	P

FIG. 19

FIG. 20

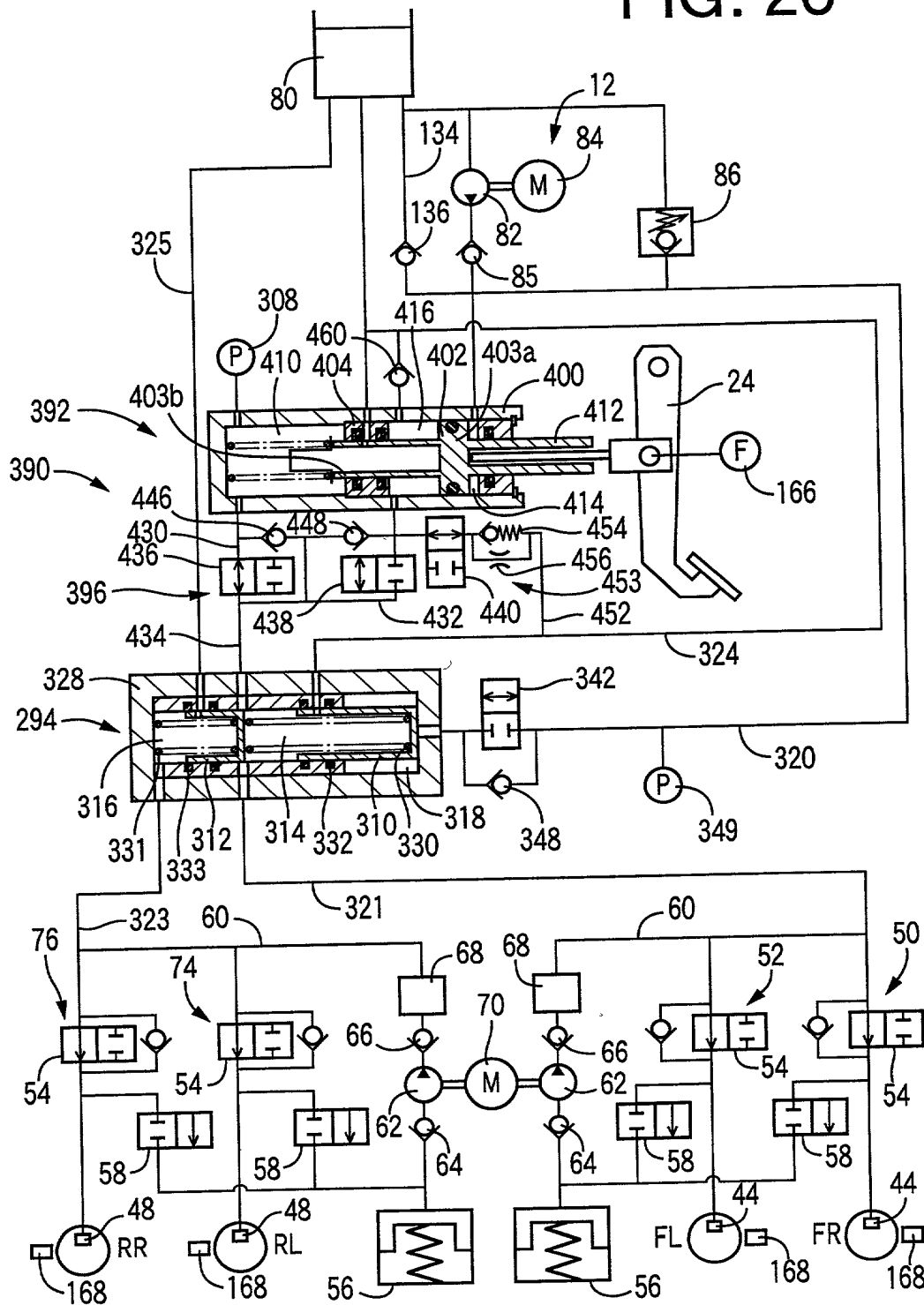


FIG. 21

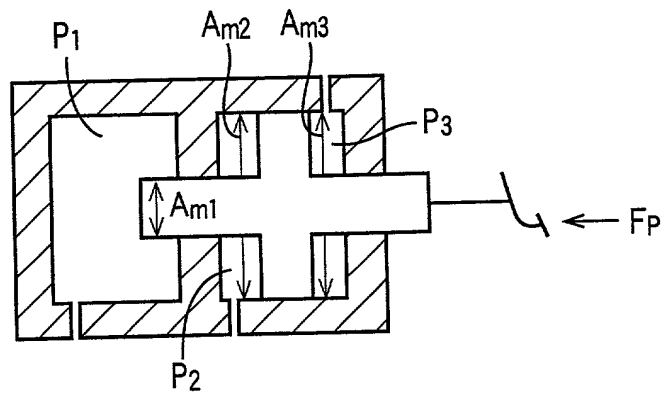


FIG. 21

FIG. 22

	1 st STATE	2 ND STATE	3 RD STATE
SHUT-OFF VALVE 436	OPEN	CLOSED	OPEN
SHUT-OFF VALVE 438	OPEN	CLOSED	CLOSED
SHUT-OFF VALVE 440	CLOSED	CLOSED	CLOSED
SHUT-OFF VALVE 342	CLOSED	OPEN	CLOSED
RATE OF FLOW INTO BRAKE CYLINDER	$\{(A_{m1} + A_{m2})/A_{m3}\} \cdot q$	q	$(A_{m1}/A_{m3}) \cdot q$
BRAKING PRESSURE	$(A_{m3} \cdot P)/(A_{m1} + A_{m2})$ (FP = 0)	p	$(A_{m3}/A_{m2} \cdot P)$ (FP = 0)

FIG. 23

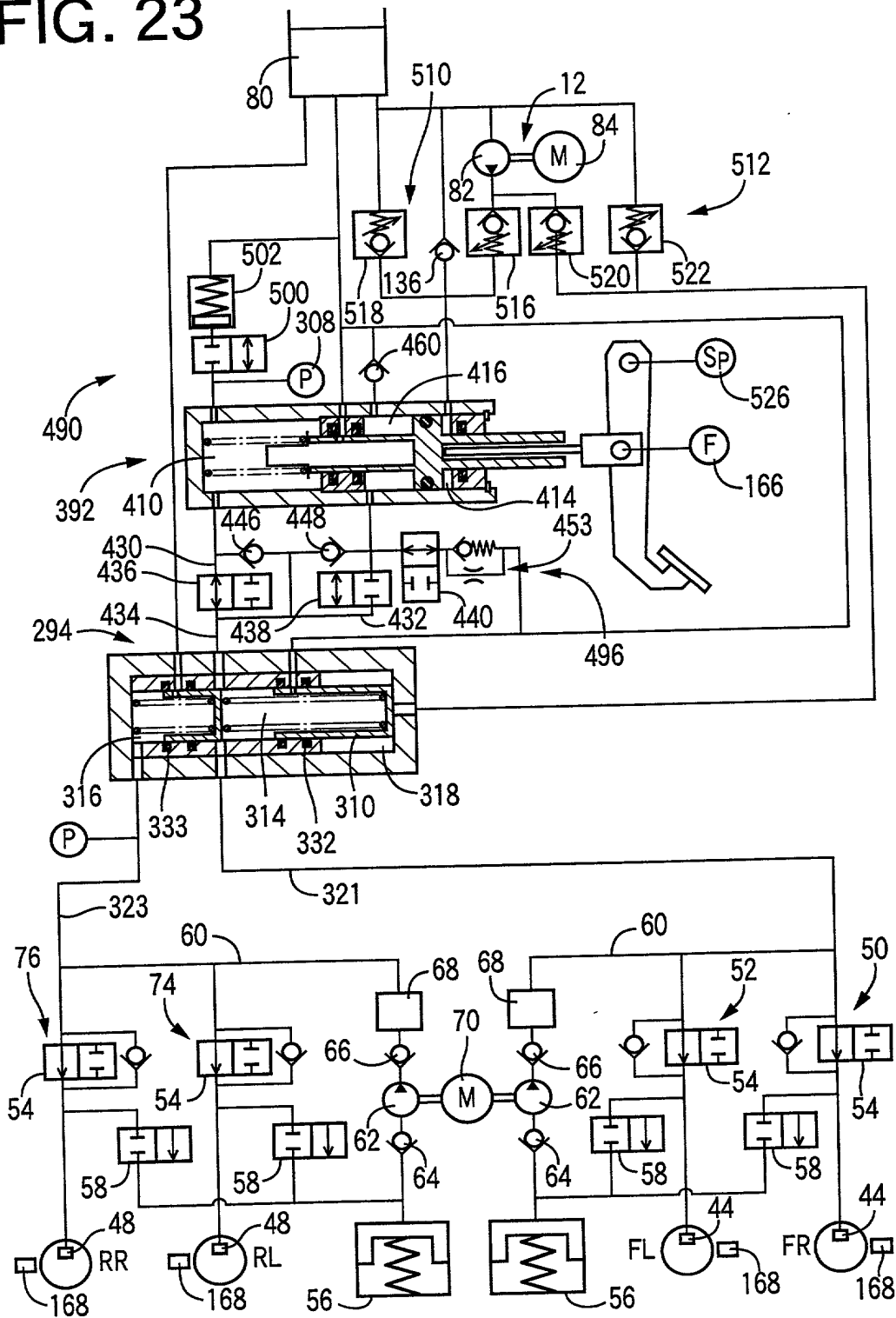


FIG. 24

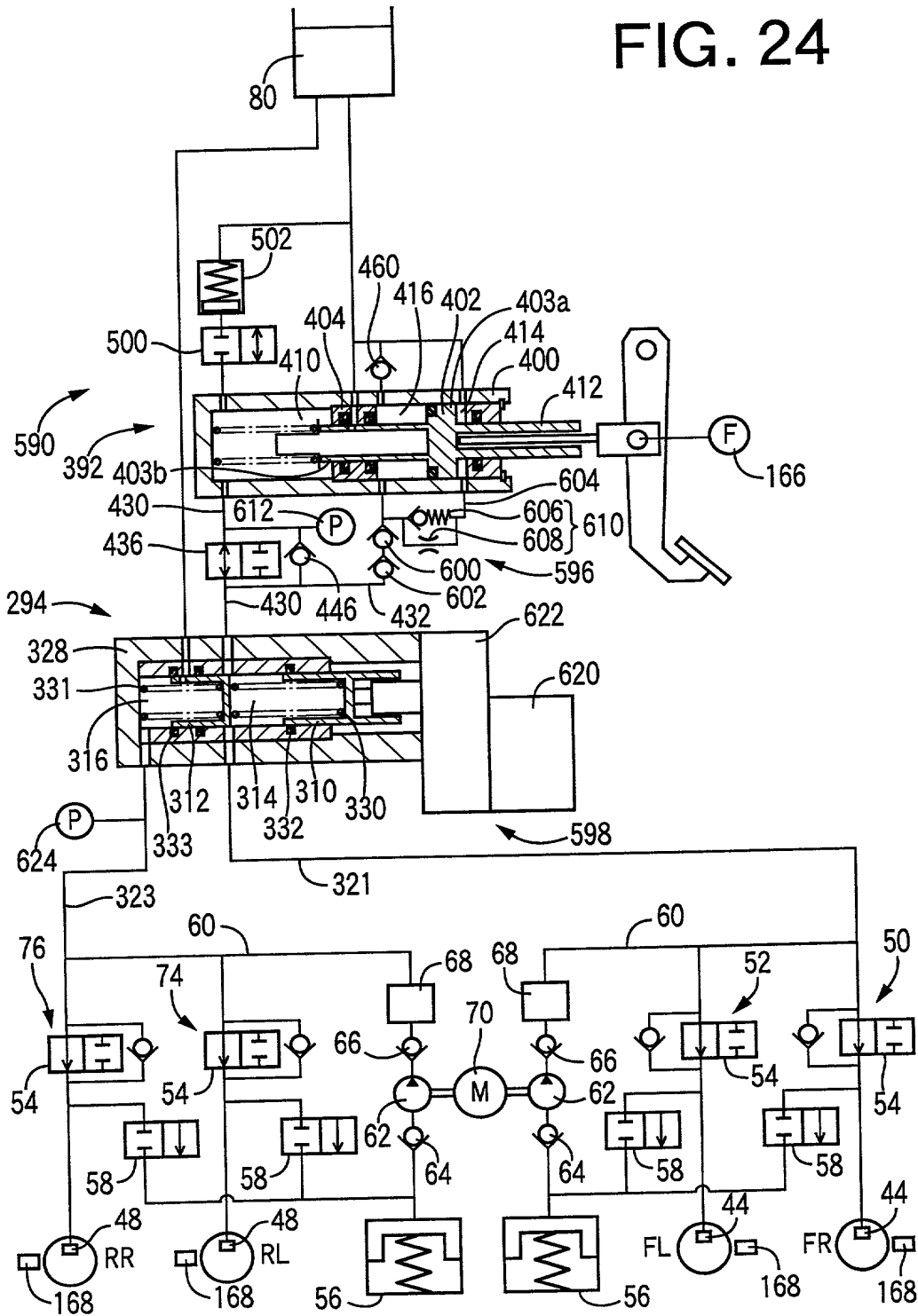


FIG. 25

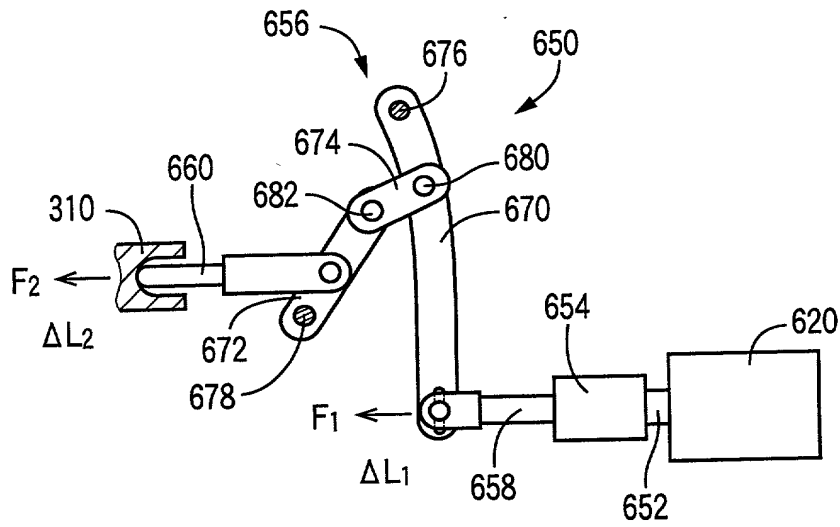


FIG. 26

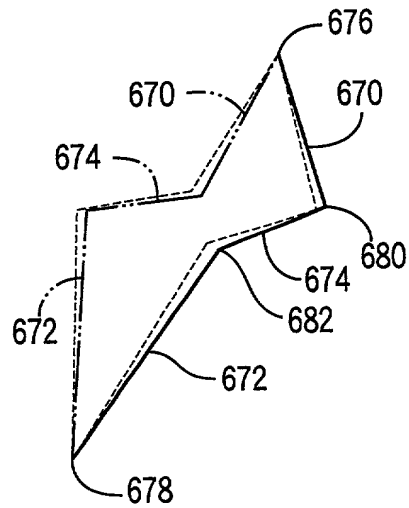


FIG. 27

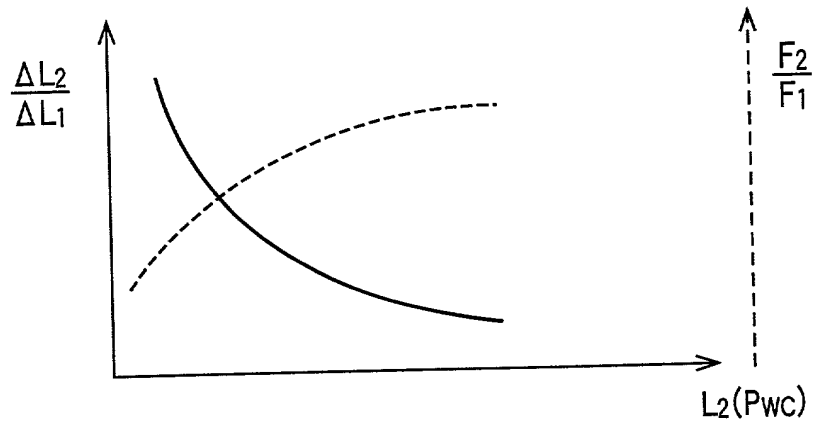


FIG. 28

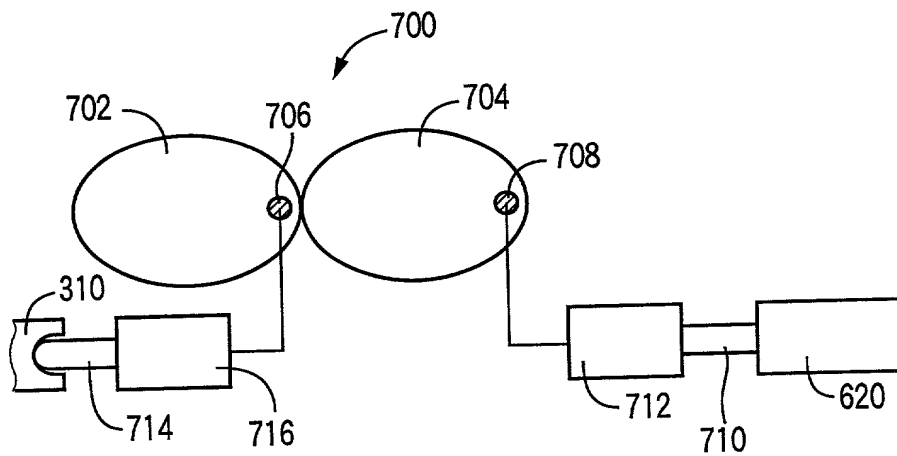


FIG. 29A

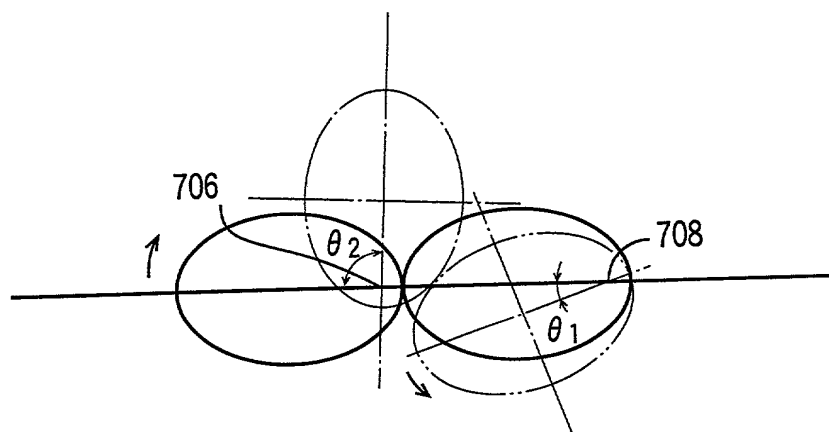
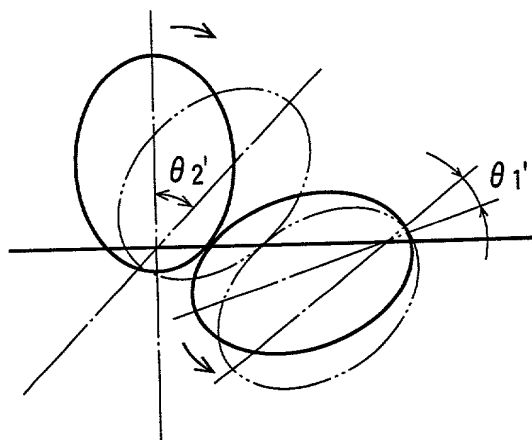


FIG. 29B



$$\frac{\theta_2'}{\theta_1'} < \frac{\theta_2}{\theta_1}$$

Socioeconomic characteristics		Health status		Health care utilization		Health care expenditure	
Mean	SD	Mean	SD	Mean	SD	Mean	SD
Age (years)	65.4	10.2	1.2	0.8	0.5	1.2	0.8
Gender							
Male	50.0						
Female	50.0						
Marital status							
Married	50.0						
Single	50.0						
Widowed	50.0						
Divorced	50.0						
Education							
Less than high school	50.0						
High school	50.0						
Some college	50.0						
College or more	50.0						
Income							
Less than \$10,000	50.0						
\$10,000-\$20,000	50.0						
\$20,000-\$30,000	50.0						
\$30,000-\$40,000	50.0						
\$40,000-\$50,000	50.0						
\$50,000-\$60,000	50.0						
\$60,000-\$70,000	50.0						
\$70,000-\$80,000	50.0						
\$80,000-\$90,000	50.0						
\$90,000-\$100,000	50.0						
\$100,000 or more	50.0						
Health status							
Excellent	50.0						
Good	50.0						
Fair	50.0						
Poor	50.0						
Health care utilization							
Physician visits	50.0						
Number of visits	50.0						
Health care expenditure							
Outpatient	50.0						
Inpatient	50.0						
Long-term care	50.0						
Home health care	50.0						
Other	50.0						

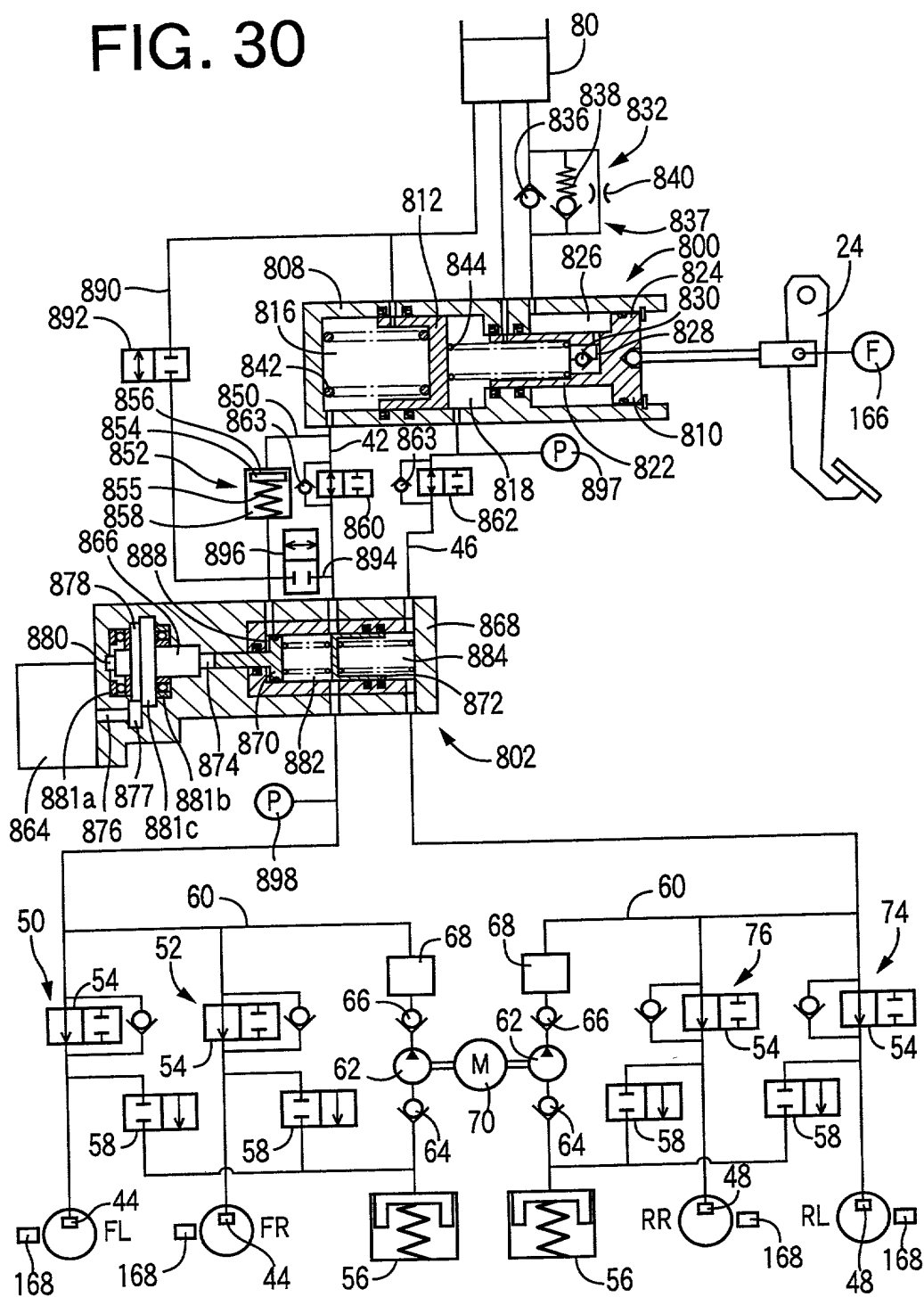


FIG. 31

	FIRST STATE	SECOND STATE
SHUT-OFF VALVE 892	OPEN	CLOSED
SHUT-OFF VALVE 896	CLOSED	OPEN
RATE OF INCREASE OF BRAKING PRESSURE	$\Delta Fd/A_1$	$\Delta Fd/(A_1 \cdot A_3)$

1.00120" 25380660

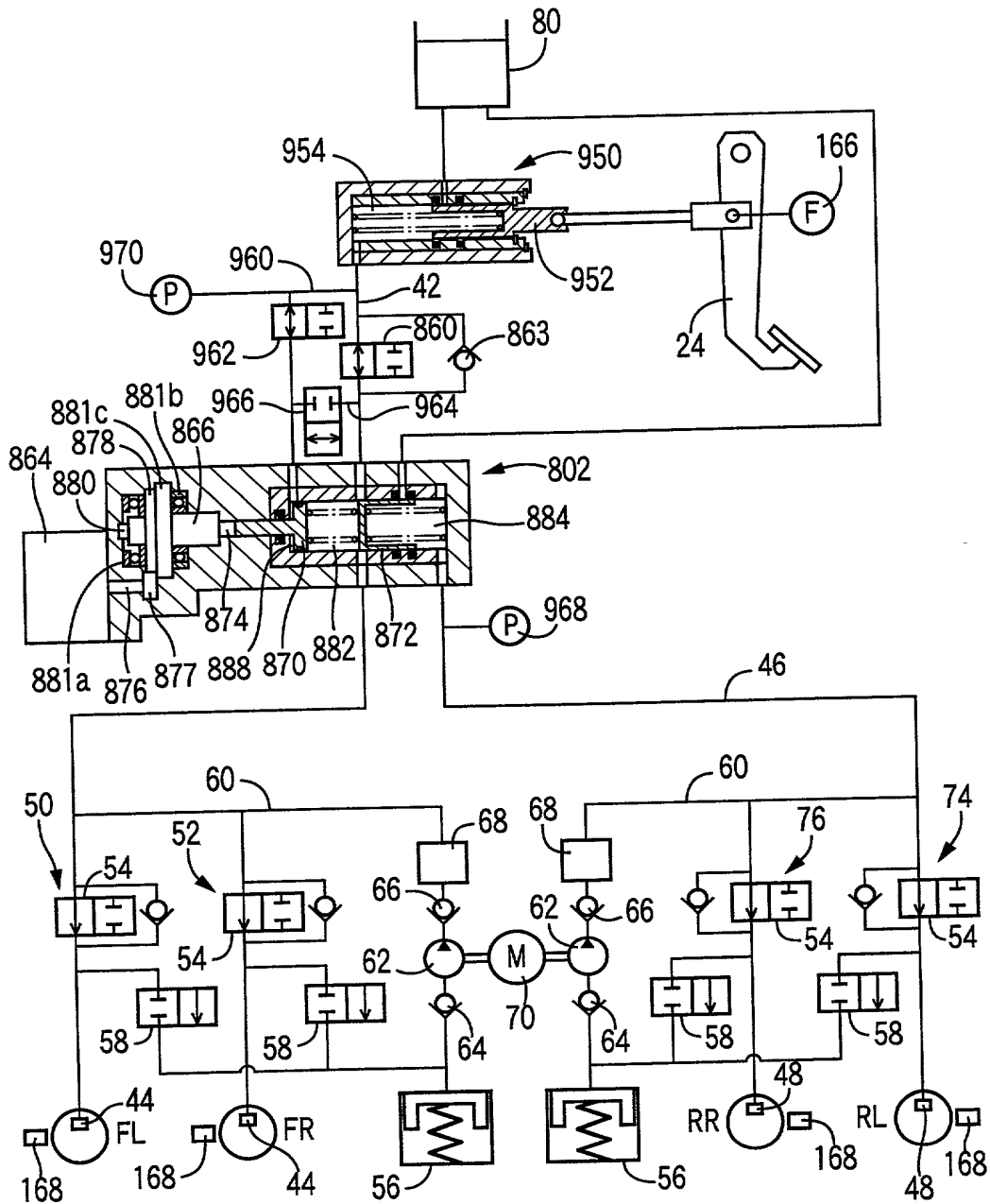
[illegible]

FIG. 33

	FIRST STATE	SECOND STATE
SHUT-OFF VALVE 962	OPEN	CLOSED
SHUT-OFF VALVE 966	CLOSED	OPEN
PRESSURE INCREASE RATE BOOSTING RATIO	$\Delta Fd \cdot \gamma / (A_1 \cdot \gamma - A_3)$	$\Delta Fd / (A_1 - A_3)$

TOP SECRET 04301 0990365